# This Page Is Inserted by IFW Operations and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- . FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

### IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents will not correct images, please do not report the images to the Image Problem Mailbox.

- (a) in sections through said at least one sheet metal layer along circular surfaces coaxial with said combustion chamber opening, said delimiting device respectively comprises a row of discrete elevations following one another in a circumferential direction of the combustion chamber opening, and, located directly opposite each of said elevations, a discrete depression corresponding in shape to the shape of the elevation associated therewith, said elevations being joined to one another by the sheet metal of said at least one sheet metal layer;
- (b) in a plan view of said at least one sheet metal layer, (i) the total area occupied by all of said elevations is at least equal to half of the total area occupied by said delimiting device, and (ii) said elevations having a shape other than that of circular arcs at least partly surrounding said combustion chamber opening so as to form said discrete elevations and associated discrete depressions when viewed as set forth in paragraph (a);
- (c) where said at least one sheet metal layer is provided with said at least one deformation, the total thickness of said sheet metal layer is greater than the thickness of the undeformed sheet metal; and
- (d) the deformability in height of said elevations is smaller than the deformability in height of said bead.

- 2. (previously presented) Cylinder head gasket in accordance with Claim 1, wherein, in sections through the sheet metal layer along circular cylindrical surfaces coaxial with the combustion chamber opening, the crests of the elevations to be pressed against a neighboring sealing surface when the gasket is installed rest against said sealing surface in several contact areas, said contact areas defining a contact zone which encloses the combustion chamber opening and within which said contact areas are spaced from one another in a circumferential direction of said combustion chamber opening.
- 3.(Original) Cylinder head gasket in accordance with Claim 1, wherein the crests of the elevations extend approximately parallel to the plane of the sheet metal layer.
- 4.(Original) Cylinder head gasket in accordance with Claim 3, wherein the elevations have an approximately U-shaped cross section in sections through the sheet metal layer along circular cylindrical surfaces coaxial with the combustion chamber opening.
- 5. (previously presented) Cylinder head gasket in accordance with Claim 1, wherein the elevations are substantially inelastic under the pressure forces exerted on the elevations during operation of the engine.
- 6. (previously presented) Cylinder head gasket in accordance with Claim 1, wherein the elevations have substantially no plastic properties under the pressure forces exerted on the elevations during operation of the engine.

- 7.(Original) Cylinder head gasket in accordance with Claim 1, wherein the material of the sheet metal layer in the area of the elevations is cold-worked by deformation up to almost the breaking limit.
- 8.(Original) Cylinder head gasket in accordance with Claim 1, wherein the elevations lie close to one another with at least almost no spacing between them in a plan view of the sheet metal layer.
- 9. (Original) Cylinder head gasket in accordance with Claim 1, wherein the spring rate of the delimiting device, measured perpendicularly to the sheet metal layer, is greater than that of the neighboring bead all around the combustion chamber opening.
- 10.(Original) Cylinder head gasket in accordance with Claim 1, wherein the total thickness of the sheet metal layer in the area of the delimiting device is smaller than in the area of the neighboring bead all around the combustion chamber opening.
- 11. (Original) Cylinder head gasket in accordance with Claim 1, wherein a device for delimiting the deformation is provided for each combustion chamber opening.
- 12. (Original) Cylinder head gasket in accordance with Claim 1, wherein the delimiting device is arranged radially within the neighboring bead.
- 13. (Original) Cylinder head gasket in accordance with Claim 1, wherein only a single device for delimiting the deformation is provided for each combustion chamber opening.

- 14. (Original) Cylinder head gasket in accordance with Claim 1, wherein the bead lying close to the delimiting device is of circular design in a plan view of the sheet metal layer.
- 15. (Original) Cylinder head gasket in accordance with Claim 1, wherein the delimiting device forms a two-dimensional pattern of discrete elevations in a plan view of the sheet metal layer.
- 16. (Original) Cylinder head gasket in accordance with Claim 15, wherein the elevations form a regular pattern.
- 17. (previously presented) Cylinder head gasket in accordance with Claim 15, wherein in a plan view of the sheet metal layer the spacings between neighboring elevations are smaller than the maximum diameters of the elevations.
- 18. (Original) Cylinder head gasket in accordance with Claim 15, wherein all elevations are of approximately the same design in a plan view of the sheet metal layer.
- 19. (previously presented) Cylinder head gasket in accordance with Claim 15, wherein the elevations are substantially knobshaped.
- 20.(Original) Cylinder head gasket in accordance with Claim 15, wherein the elevations form a honeycomb pattern in a plan view of the sheet metal layer.
- 21. (previously presented) Cylinder head gasket in accordance with Claim 1, wherein the elevations are formed by at least one additional bead which in a plan view of the sheet metal layer surrounds the combustion chamber opening in substantially closed configuration and forms over at least part of its length a substantially complete meander extending in a circumferential direction of the combustion chamber opening.

22. (Original) Cylinder head gasket in accordance with Claim 21, wherein the device for delimiting the deformation is formed by a single bead.

23. (currently amended) Cylinder head gasket in accordance with Claim 1, wherein <u>in</u> a plan view of the sheet metal layer the elevations are formed by a ring of beads which encloses the combustion chamber opening, said beads extending approximately in a radial direction with respect to the combustion chamber opening.

#### 24. (canceled)

25. (Original) Process for the manufacture of a cylinder head gasket in accordance with claim 1, wherein the elevations are first produced with a larger height than their final height and are then reduced to their final height by such a partial reverse deformation of the sheet metal layer that their cross section in circular cylindrical surfaces coaxial with the combustion chamber opening is approximately rectangular or trapezoidal.